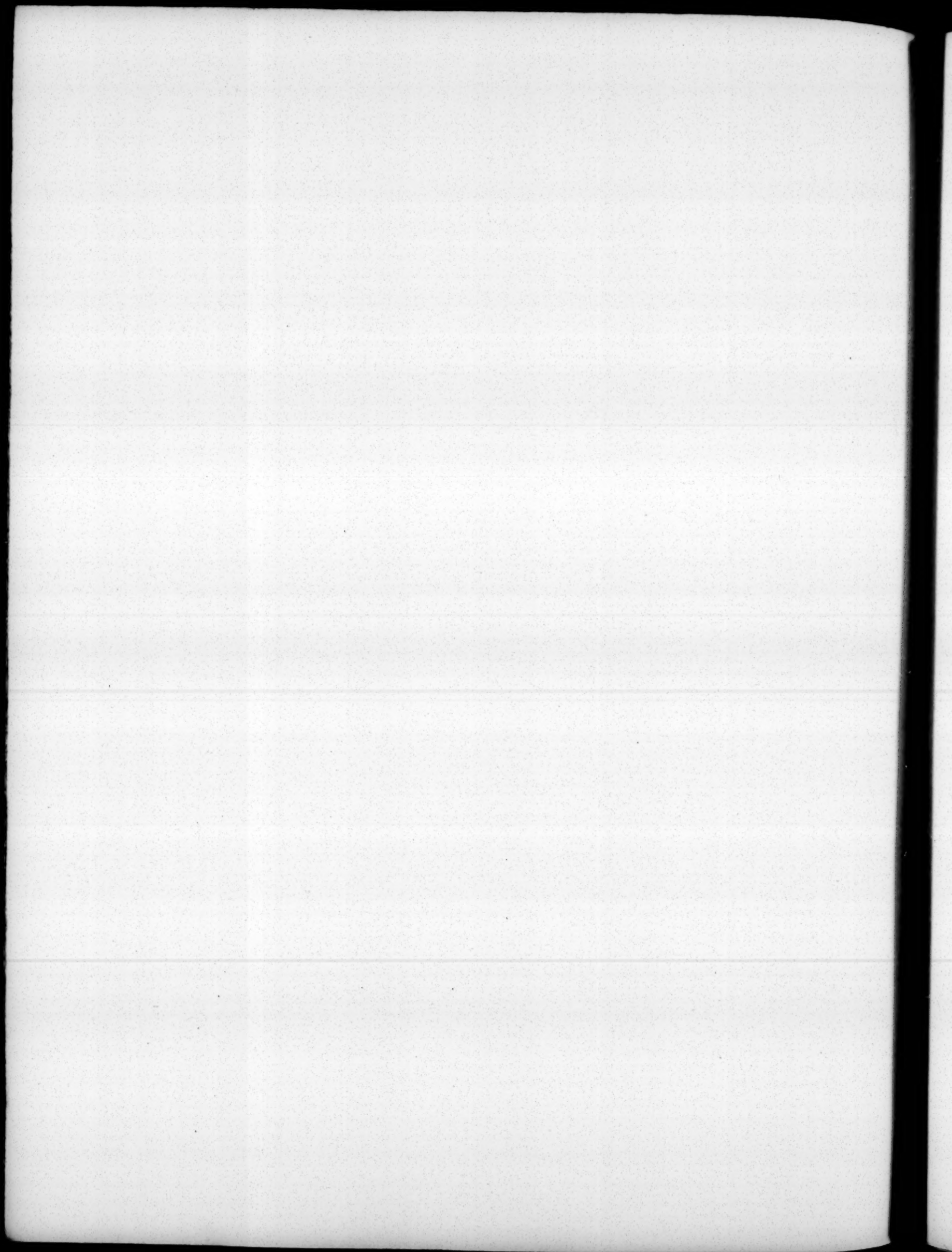


M E M O I R
ON THE
PRESENT STATE
OF
NAVAL AND MILITARY SURGERY.

ADDRESSED TO
THE RIGHT HONOURABLE EARL SPENSER,
FIRST LORD OF THE ADMIRALTY.



MY LORD,

EVER since I have been capable of thought, I have struggled for objects far beyond my reach to obtain. In this anxious moment, when I have about me no selfish views, no mean nor worldly cravings, no desires which I should not be proud to avow, there dwells upon my mind this oppressive and prophetic feeling, that I am perhaps going to suffer the force of all disappointments. I am upon the eve either of achieving by my zeal a great public good, or of preventing, by an imprudent and too sudden movement, a new order of things in that department which needs most of all to be improved.

But, my Lord, I have a claim upon your Lordship, which you will never refuse. I have studied Naval Surgery with particular care. I have bestowed upon it of money, of time, of la-

bour, more,—than I am entitled to bestow. I have followed your victorious fleet, and attended your prisoners and your wounded, as if I had been attached to Government by old services and high rewards. These, my Lord, are my privileges. I am now retiring from this busy scene, and all my claim to your Lordship's notice, is this desire to be useful.

I am but ill prepared to speak upon the most interesting of all subjects; I am fearful of that enthusiasm, which is so apt to mix itself with thoughts such as I am now to expose to your Lordship; I am anxious, above all, to know how my advice may be received by those accustomed to judge of high matters:—yet still I feel myself entitled to propose the establishing of ONE GREAT SCHOOL OF MILITARY SURGERY.—It were almost, I think, an object of national gratitude; surely it were an institution humane, charitable, useful above all others; in any situation, I should feel what I now propose to be nothing presumptuous, nothing less than a sacred duty, which no fear of impropriety should repress. But when I perceive by every movement, that it is the sincere wish of every man in power to raise this department to an honourable and distinguished rank—when their efforts are ineffectual only from the want of those suggestions which must come from medical men—I am no longer in doubt how my thoughts on such a subject will be received; and all those apprehensions which the nature of the occasion must excite, are lost in the exulting prospect of seeing a great national benefit grow out of this single thought, once vague and transient, but now rising in importance even while I am explaining myself to your Lordship. ——— With such feelings labouring in

my mind, and with an entire conviction that you will delight in whatever promises a public good, I must write with an enthusiasm in regard to the subject, and with a perfect freedom in all other respects, which your Lordship knows well how to excuse, perhaps to approve.

How shall I venture to tell you of the melancholy state into which the public service has fallen? It never was respectable, it is now disgraceful. Things are truly come to such a pass, that to point out the means of reformation must be a great relief. No plan of national education has ever been proposed. Every other branch of our profession is taught, apart and carefully, while Military Surgery, the most peculiar of all departments, has been left to chance; and in this line it is easy to trace the cause of many evils, too serious to be long thought of temperately or patiently.

When a young man enters into the Navy, his education is but ill begun, and cannot improve. He is put down into a hole, there to remain for years. He is deprived of all communication, of all desire of knowledge. To breathe the vital air, he must live in the promiscuous conversation of a Ward-Room. Politics, History, Anecdote, News—every thing is heard there but that which interests him most, which is the very business of his life. His youthful ambition is dead;—his profession! is forgotten;—his first proud feelings, which sprung up with the first dawnings of knowledge, are buried there;—his mind is vacant and powerless;—“and all his precious hours are running down to waste.”

To the life of a navy surgeon there are, God knows, no seductions. Nothing, as it now stands, can drive a young man into such a service, but want of education, and want of friends; nothing can support him, even for a short term of years, through the labours and difficulties of this life, but a love of his profession, and a sense of duty above all obstacles—hardly, indeed, can any thing retain him in a service so poorly appointed, so little honoured—he never feels himself till he leaves it, returns to school, and begins his education anew!—and those pensions which Government has held out as permanent rewards, are but as bribes for such young surgeons to continue their services only in the days of their ignorance, and to retire when they first become fit for service: Thus do they complete their education with the accumulated wages of service which they could not perform.—But behold, when their education is in some degree renewed, when they are fit to be received any where but in the fleet, they prefer the permanent establishment of village surgeon, in some remote and miserable place, to the service of the State; plainly declaring against that profession, to which they have given up the very prime and vigour of their life, a degree of contempt which, were it needful, I never should be able to express.

Be assured, my Lord, that while Government strives to attach men to its service—to lead them up to the knowledge of a difficult profession, through all the intricacies of a learned science, by money alone! it cannot succeed. Nor will men ever delight in a profession which is not made respectable, honourable, and useful. Men trained to the sea, find themselves entered into a way of life full of danger, but full of honour,—and for this sake they love it.

But ours is a profession where a thousand ways are open to ambition: every situation is easy and gainful, compared with this of the Navy; and from year to year our fleets are thoroughly drained of all those whom Government should wish to retain.

Indeed, my Lord, this is a serious business, and men willing to find, in all that has been done, nothing but negligence, profusion, and waste, will say, in derision, "Here now we see, how Government may, by a mean œconomy, ruin the most important of all establishments, and bring matters to such a pass, that young men of the lowest education, of the slenderest means, shall refuse the service;—daily advertisements shall be quite neglected;—examination shall fall into utter disuse, and all shall be promiscuously received;—the British seaman shall be more helpless in the day of battle, than the peasant when employed in his peaceful labours;—the poor man providing from his hard-earned pittance help for himself and family in the hour of illness, while the most dangerous service hardly extorts from such a government the very appearance of care."

Those, my Lord, are the reproaches to which a government rather uninstructed than careless is unhappily exposed;—and it is all too true. Perhaps in a whole fleet there are few Surgeons Mates, not one may be, who is able to perform the greater operations of surgery. It has happened, that, after the most earnest entreaties of the Officers, of the Surgeon, of every one concerned, a ship of the line has gone into battle without one assistant on board; no, not one to screw a tourniquet, to tie an artery, to hold a shattered stump, to put a piece of lint to a bleeding wound!—These things, my Lord, must make a strong impression on the

public mind, and must create very awful feelings in those who are concerned. Had those shots which have passed so often through the cockpit, and which have killed so many among those who were already wounded, and who had retired to the place of help and safety; had one of those shots struck the surgeon—what must have been the condition of those who survived him! Inevitable death from wounds which are not deadly is an awful sentence! who can bear it?—Let the man of the most determined courage, my Lord, think but of this! and, if he have not that carelessness of life which deprives mere animal courage of all praise, let him say with what heart he can go into the midst of battle, where in a few moments all is horror, confusion, and dismay; where the danger of the hour makes no respect of persons; where the high and the lowly are laid side by side, dead and dying! and the surgeon stands for a moment in his place,—alone—fixed and motionless,—with folded hands,—in horror and in deep astonishment at the situation in which he finds himself! “Can such things be, and you that do behold them still preserve the natural ruby of your cheeks?”

Such are really the dangers to which that order of men are exposed, upon whom, more than ever in the annals of this empire, the very empire itself and all its future annals depends. I have, I hope, pressed these thoughts, as becomes me, not too rudely.—Had the case been hopeless, I should have refrained; but while there is hope, I would bend with all the little power I have, on that lever which the weight of the state only can move:—For this is indeed the truth: at one period of time we might have said “wars of conquest have surely ceased;” but we have lived

to see Conquest running her headlong course ; overturning empires and states : and too well we know, that while we continue a maritime power, wars of commerce will never cease. We must maintain ourselves as a maritime power ; this is the only means for internal safety in the present, and the only hope of our future success, even of our existence as a commercial state. Stations must be multiplied ;—new Hospitals must be built ;—the whole establishment of our marine must be strengthened on every side ;—and nothing will give more splendour to the cares of Government, nor be more grateful to the public mind, than to see the Medical Department raised, improved, may I not say, created anew.

Is it not proved, my Lord, “ That the state cannot attach men to its service early in life ; nor train them through all the intricacies of science by money alone ! ” and were it not easy to propose to young surgeons an object really worthy of their ambition, and a scheme of education which would make them delight in their profession, and incline them continually to improve ?—For a well conducted education is the highest bribe—to become the member of a great school, is itself a privilege—and to rise, by force of abilities and knowledge, to the head of such a school, were a noble reward.—These hold out that kind of hope which supports a man through every great duty, whether of perseverance or sudden exertion ; of thought or of bodily labour. Unless you can fix his hopes on some grand system of life, you will never obtain from a young man those services which, with high motives, he is able to perform. IF YOU WOULD ENSURE HIS DILIGENCE, ENDOW HIM WITH KNOWLEDGE.

The INSTITUTES of a NATIONAL SCHOOL are easily imagined.—The object is expressly defined.—The instruments by which it is to be accomplished are in daily use—and all its consequences are as sure almost as the operations of a mechanical power. Give the Professor all the means of instruction; draw out in due form the subjects of his lectures; the forms of teaching; the rules, the privileges, and the oaths of the pupils; and mark these things down as the institutes of the school.

I. The Professor must teach with perfect care the essentials of Anatomy; the great principles of Surgery he must found upon these dissections; and all the great Operations, all the Accidents which each part of the body is liable to, all kinds of wounds must be fully explained.

II. These general principles of the science must next be applied to the peculiar duties of the Military Surgeon; the Professor must teach carefully the peculiar nature of Gunshot Wounds.

III. He must deliver a short code of Military Medicine explaining the fluxes, fevers, spasms, infectious diseases, and all the peculiar duties of the camp and hospital, and he must explain the scurvy, ulcers, infections, and all the disorders most frequent in ships of war.

IV. He must teach Medical Geography—the climates, seasons, coasts of various countries.—The manner of conducting foldiers on a foreign expedition—the general care of their health—the choice of encampments—the forming of hospitals on shore—how to attend an army in the field—how to convert churches, gra-

naries, public buildings, into occasional hospitals—how to lay the wounded in besieged towns—how to carry them off the field in a retreating army.

V. Along with these, must be taught Military Oeconomics, diet, general medicine, exercise, clothing, and all methods of preventing disease. Without this knowledge, no man is entitled to serve; How few are thus taught? How few are fit for service? How few are there who are not conscious of those blurs and blots in their general education, which no diligence of their own can ever do away?

VI. The last, and not the least important duty of the teacher, should be to point out for his pupils a future Plan of Study, to make for them a selection of books; to deliver critical and practical observations on those which are to be most used. The teacher must not only instruct his pupils for the present; he must select objects for their future study. He must teach them this truth, that their education is only begun, and that the best of their studies remain as yet untouched; he must show them how to think for themselves, and then he may hope to reap in his turn the fruit of their labours, and live to see their observations and cases published under his own care; he may, after a regular book of anatomy and surgery, see the whole enforced and illustrated by cases and observations; and, working along with his pupils, he may perpetuate the institution, by publishing the WORKS of the MILITARY SCHOOL.

To perform his duties with spirit and energy, his place must look like what it is; the centre of a Great School, which stands in an eminent and respectable station, whence well instructed surgeons are continually going out on every line of service, and

returning the inestimable benefit of a good education, with those kinds of knowledge for which they are well prepared ; which they are continually collecting in all parts of the world ; which they send willingly to that school with which they are still closely allied.

The Professor must in all respects have the perfect command of his school. He must have a LECTURE-ROOM, capable of being occasionally enlarged ; he must have a DISSECTING ROOM proportioned to so great a purpose, wisely conducted, no doubt, and modestly, but under the absolute protection of the law. He must have a LIBRARY, continually increasing, by certain fees, from occasional pupils. He must have a HOUSE OF ASSISTANTS, like the clerks of a great hospital ! one keeper of the library,—one a dissector for the class,—two to inspect the pupils dissection,—and two must be appointed to write, under the direction of the teacher, his lectures, his studies, the communications from his older pupils, and the extracts from books. The character of so rich an education for those young men whom the teacher might prefer to such stations, would ensure them all kinds of promotion, and would be such a reward as money could not equal.

But especially, I say, he must have always a perfect command of his school ! a UNIFORM for those who are of the school, and who are to have the first seats—his place surrounded with walls—his pupils must come gratis to that school, and must take an oath “ to be faithful to their studies ; to be serviceable to Government in every way ; to be diligent in all the occasional duties committed to their charge ; to employ their time in lectures, reading, dissections, till that period arrive in

which they are to be appointed to service." Let every one who comes rather as a stranger to the military school sit behind the regular pupils, and pay his fees to the institution, for the support of the library, and for defraying the general expence. Let those who, having once taken the oath, would leave the service, pay up, upon forsaking the school, all their arrears of fees, and put off that uniform which is the badge of their attachment to their country. Let all the school have the privilege of attending some great hospital, or rather give some great hospital the privilege of having those pupils attend its operations, (with a small fee) for such an attendance would almost create an hospital.

Let the library be open daily ;—let there be fires in all the rooms ;—let them be made comfortable for study, and a sort of home for those attached to the school ;—let the great volumes of anatomical plates lie always on the tables ;—let books be issued in circulation every week ;—let there be duplicates according to the judgment of the teacher of every useful book.

Those who, about to enter into this way of life, would begin a regular education ; and those who are at this moment engaged in service might, by a perpetual circulation, pass through this school, have their education renewed, and be assimilated with the whole. The school would be full in times of peace ; it would send out its surgeons with increased industry and knowledge, when we had declared war. The pupils of this school would be examined by a board of controul, where their teacher should have a seat, but no voice ; where he could have no other interest but that of instructing young men, so as to answer like masters in their profession, even before they had begun to practise, and should

be able almost to annul and render void the foolish formality of examinations, not by ignorance, but by superior knowledge.

The master of such a school would spontaneously perform other and higher duties; he would have, from his very office, such energy, so high a sense of his public duties, such versatility of talent, that, in all emergencies, he would render important services to the state. He would plan hospitals; would go to assist the sick and wounded; would help in the detail of new establishments. Is it not distressing that, when a fleet has suffered in some severe engagement, Government has no general surgeon, whose advice and services they can command, that their wounded are abandoned to the carelessness of ignorant men, and shipwrecked, I may say, upon their native shores?—Perhaps in certain seasons he might sail with fleets, or accompany armies, from a desire of further knowledge.—Perhaps he would give occasional lectures at the setting out of any great expedition, going down to meet with the surgeons of the fleet, to inquire about all their little wants—to see that they were indeed prepared at all points, to converse with them, to lecture to them. All these occasional duties he should do without expence to himself that he might do them easily; and they should be voluntary that he might perform them with zeal.

My Lord, I know too well that plans of national schools have been but the reveries of enthusiastic men, and in this sense, I would almost avoid the name; yet surely an institution having such objects as these, so expressly limited in its purpose, so entirely practicable, so sure of attaining its end, stands in the first rank among plans of national education. This is, to a state, the only security it ever can have of procuring well instructed and diligent men. Promotion would no longer go by courtesy. Exa-

mination would cease to be an unmeaning form. Examiners, who are now afraid to touch those whom they are sure to find ignorant (and yet dare not reject), would then examine severely, because they would find knowledge to grapple with, and would be able to select well informed young men.

It is now well known, that there can be no other security.—We assure ourselves of a man's knowledge rather by his education, than by questions which are so often conned for the occasion and repeated coldly, without interest, without understanding. No University trusts to this slippery test, but requires, even for ordinary studies, a peculiar and regular education continued for years.—Certain courses are required absolutely, more general studies may be added to them; but those must be performed.—In this sense, a Military School should be a regular College.—It should be erected in the centre of other schools—The pupils should have the choice of other teachers, and inducements to various and liberal studies—They should be early attached, and with sensible and sober views, to that service which now they fall into by chance and misfortune.—They should be early trained to those parts of knowledge which now they learn from books, too late in their course of service to be of much use—They should be well read in those authors who now fall into their hands by a sort of accident.—While they had their choice of other studies, they should feel themselves peculiarly responsible for their perfect acquaintance with all the lessons of the *Military School*.—They should have, in short, every inducement to serve, but should feel no bondage in serving.—They should be attached to the School only by the usefulness of their studies, but they should be allowed to leave it with no other forfeiture than that of losing their place and precedence.

The security is perfect also ; because, for the studies of such a school, genius is not so highly necessary ; diligence alone is required ;—in medicine, and in surgery, above all ! enterprise is dangerous, and experiment almost guilty. That good sense which is so universally diffused, that plain knowledge which is so easily acquired, and that moderation which industry, and the knowledge of plain and simple matters always begets, are sufficient for all the occasions of life, and more to be prized, in my estimation, than the most splendid talents. How often is genius wild, ungovernable, dangerous ? How much, on the other hand, do we value the marks of industry, humanity, and modest knowledge, sure tokens of a useful man ? And such, I am very sure, would be the character of every young man who should issue from such a school.

It is true,—that in every great institution connected with a state, the Means also must be planned. But, my Lord, I am well assured, that this Institution needs only to be put in motion ; that a man, capable of arranging and conducting such a School, might make himself independent of all external aid ; and (should Government be blind to so high an interest) could support himself in every thing, but the splendour which attends the forms of a National School. For this plan of education belongs to one half of all those bred to our profession, since more than one half of those educated to medicine in the common schools belong to the Navy, the Army, the India department, or our Foreign Dominions ; and although perhaps the India department might not directly contribute towards the establishing of such a school,

yet where Lectures were given on Anatomy, and Surgery, and Naval Medicine, and Climates, and Contagions, and all the accidents and adventures to which Foreign Troops are exposed, all the surgeons of the India department would become voluntary CADETS of that school, where alone they could learn their duties. Pupils not attached to Government would come to it from every department—from all parts of the kingdom—perhaps from other Countries. Their fees given to the secretary of the institution would defray much of the expence. The Library of itself would grow out of small fees, as every library must do. The Museum belonging to the school would be made in the school; the Books which might be published as the works of the school would also be a source of gain. Every movement of such a machine should strengthen its powers. In Mechanics, a great Engine wears out the very materials of which it is composed; but in Politics, the materials of a great Institution like this are in our hands; we have but to arrange them so as to begin the motion! and while the movement goes on, it draws into itself every thing which belongs to it, and becomes a great system, self-improving, and continually progressive, begetting an enthusiasm in all who are allied to it, which supports the whole.

Even should it be apparently expensive, that expence would be repaid a hundred fold; for, OECONOMY OF LIVES IS THE GREATEST OECONOMY TO A STATE. And indeed we must have this ungracious thought still in our mind, that each sailor and soldier is but a living animal, strong and active, purchased for a certain use. Each costs Government a sum of money equal to the one half of a surgeon's annual income. Then counting them but as

living creatures bought for a certain use, if in a year the surgeon saves by his superior knowledge but a few lives, he repays Government much more than that small sum which in the beginning of the year Government, I may say, had lent him ; and this debt is so fairly returned by every improvement in the care of lives, that I am very sure the professor of such a school, and each of his pupils in his proper place, would repay the bounty of the state a hundred fold.—Nothing would more strengthen the hand of power than a general establishment which were at once grand and commanding in its aspect, and in its nature humane and useful.

Indeed, such an institution, under any government, and by all parties should be praised and cherished.—It would be to the state a saving of lives infinitely desirable—it would do away a flagrant reproach ;—it would become to the public a rich property, which the simple idea itself would bestow almost without expence—it would be a fair succession and inheritance,—an object of high ambition to all the surgeons attached to the service of the state.—Then our ships would not go into battle without well instructed Surgeons, and Mates capable of every operation ; nor would low fevers, almost equal to the plague, rage unopposed ; the surgeons of such a school would never shrink from any service of danger ; our troops would no longer die in warm climates by thousands uncared for, and almost careless of life ! what should we not save in lives, and in money the price of lives ?

But you must be delighted most of all, my Lord, with the sentiments which must arise in those who remained faithful disciples of such a school. While learning, they would become enthusiasts ; when advanced to higher duties, they would be

worthy of being supported in a rank becoming their education; when advanced to years of experience, and well trained in those studies which their teacher had begun,—they would look forward to the most honourable of all the appointments which Government could bestow on professional men, the Teaching of the School itself. And those few who, in the course of years, from various connections, and the thousand accidents of life, fell off into the line of private practice, would be valued in proportion to the severe education and honourable conduct of that school in which they were bred. They would be more honoured then, than they are neglected now. They would be like the children of a careful father, who said, “ My sons, I have little to bestow, but you have been bred up like brothers in industry, charity, knowledge, and public virtue. These are to be your comforts, your pride, your distinction in society; and for your rewards!—I hope you will so conduct yourselves, that you may look up with confidence to the gratitude of your country.”

My Lord,—if I have a fear for the success of this plan, perhaps it is that of an enthusiastic but honest mind, that it will be too useful, too commanding to be endured! for even here—there is some danger in Greatness. On the first view of a plan in which other institutions will be absorbed, lesser offices annihilated, and great appointments comprehended within its sweeping circumference! What will not little men say? There is indeed one duty which I owe to this institution, which I fear I shall never perform; there is, I know, a sort of winning policy, a time-serving and flattering spirit which such movements require; there is needed infinite cunning and management, not of great objects, but of little minds.

But, my Lord, I am not a politician either by breeding or by nature. I would not strive against little arts; I hardly know the ways; I should hardly condescend to use them;—I would not work upwards through interest, cabal, and petty solicitations to your Lordship's favour, I claim your protection not for myself, but for a great scheme which embraces a great public good. I would have it operate with that independent influence which becomes a great establishment, downwards, from the higher powers, through all the lesser objects of arrangement, œconomy, policy, and energy within itself.

Once more, my Lord, allow me to express a degree of anxiety to know “how this is to be received by those accustomed to judge of high matters.” Let it stand or fall by itself; unconnected with me, or my little purposes, for such will be supposed,—“let it be given to the wisest,” my whole desire is that it may be useful.—Whoever may be appointed to fulfil this plan, I shall assist him with advice, with books, with manuscripts, with drawings, with plans, heartily and honestly; without irritation, without envy, without reserve; of which promise, let this be my solemn and public pledge.—It is the fortune of those who pursue medicine as an art only, to become rich, but without honour. It is the fate of those who attach themselves to science alone, to struggle with difficulties, and this, my Lord, is my condition! But such honourable difficulties I would not forsake for the ease and affluence of richer men. This was once a passion, but now it is a fixed habit of mind, in me, a second nature—indeed, I am not building a ladder for myself to climb upon to some ambitious height; I am thinking,—believe me, my Lord,—more of others than of myself. I am not fit, nor willing to be re-

moved from that spot where chance has rooted me.—Every thing rests with your Lordship. This plan is unencumbered with little designs on my part ; it is submitted to your Lordship, because in so responsible and so high a station, you are as an organ of the public mind, to judge betwixt me and that public, what degree of notice these suggestions deserve.——This is in every sense a private communication ; no other copies have gone out of my hands ; no great man has been solicited ; no private friend has revised it ; it is printed only for your Lordship's use, and to do justice to the subject ;—and will you, my Lord, also condescend to receive it in this form as a mark of particular respect ?

I am now, my Lord, to take my leave—and I do so under this persuasion ; that nothing could be more afflicting to your Lordship, than the thought of men suffering, and continuing to suffer, too much, in the cause of their country.—Perhaps your Lordship's mind is warmed, and harmonizes in some degree with that form and language which a subject like this, will naturally assume—happy if it be so, for that will give life and energy to every future movement.—But surely there comes a second stage of thought ;—in which the reason of the thing, with all its consequences, must sink down into your mind, and in a way not to be moved by any slight considerations. It is on this ground, my Lord, that I hope every thing from your deliberate goodness.

JOHN BELL.

YARMOUTH, }
January 20. 1798. }

